

## LISTING OF CLAIMS:

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1. (canceled)

1                    2. (previously amended) The timing device according to claim 10,  
2    wherein the at least one sensor unit for scanning the first group and the at least one  
3    higher-order group of code markings consists of a single sensor-emitter-unit.

3 and 4 (canceled)

1                    5. (previously amended) The timing device according to claim 10, wherein  
2    in the sensor unit a two-channel evaluation of the optical signals is performed.

6. (canceled)

1                    7. (currently amended) The timing device according to claim 10, wherein  
2    the at least one code track and the groups of code markings have a predefined  
3    differences ~~difference~~ between their optical density levels.

1                    8. (currently amended) The timing device according to claim 7, wherein  
2    the at least three different optical density levels correspond to at least three different  
3    gray levels which can span a range between light-blocking and almost complete

4 transparency.

1 9. (currently amended) The timing device according to claim 8, wherein  
2 the carrier of the timing device is made of a reflecting material and the groups of code  
3 markings have different degrees of reflectivity relative to the carrier and relative to  
4 each other.

1 10. (currently amended) A timing device comprising a carrier having a  
2 first group of code markings and at least one higher-order group of code markings  
3 disposed in at least one code track, said first and at least one higher-order group of  
4 code markings being scanned by at least one sensor unit to produce signals, said at  
5 least one sensor unit comprising a light source and a photo-transistor, ~~wherein the at~~  
6 ~~least one code track has a different optical density compared to the first group,~~  
7 wherein the code markings of the at least one higher-order group overlap with the  
8 code markings of the first group in the at least one code track, wherein the code  
9 markings of the first group are equally spaced from one another, whereas the code  
10 markings of the at least one higher-order group are distributed over the code track  
11 with an arbitrary spacing and form segments on the timing device for controlling  
12 different functions, wherein the at least one code track, the first group of code  
13 markings ~~has a predetermined optical density~~ and the at least one higher-order group  
14 of code markings ~~has an~~ have different optical density ~~different from that of the first~~  
15 ~~group, wherein the groups of code markings have~~ levels in comparison to each other,  
16 so that there are at least three different optical density levels with a detectable

17 gradation of optical density levels, and wherein the detectable gradation is used for  
18 generating control or position signals.

1 11. (previously amended) The timing device of claim 10, wherein said  
2 different functions include at least one of the functions of controlling a start position,  
3 controlling an end position, calibrating the timing device, and determining an absolute  
4 position of the timing device.

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cont

1 12. (currently amended) A positioning device, comprising a timing device  
2 with a carrier having a first group of code markings and at least one higher-order  
3 group of code markings disposed in at least one code track, with the code markings  
4 being scanned by at least one sensor unit for producing a signal, said at least one  
5 sensor unit comprising a light source and a photo-transistor, <sup>51406</sup> wherein the at least one  
6 ~~code track has a different optical density compared to the first group~~, wherein the  
7 code markings of the at least one higher-order group overlap with the code markings  
8 of the first group in the at least one code track, wherein the code markings of the first  
9 group are spaced at constant intervals from one another, whereas the code markings  
10 of the at least one higher-order group are distributed over the code track with an  
11 arbitrary spacing and form segments on the timing device for controlling different  
12 functions, and wherein the code markings of the at least one higher-order group are  
13 used for at least one of the purposes of controlling a start position, controlling an end  
14 position, calibrating the timing device, and determining an absolute position of the  
15 timing device; said positioning device further comprising a signal processing device

16 that converts the sensor signal into a control signal and is connected after the sensor  
17 unit, wherein the at least one code track, the first group of code markings has a  
18 ~~predetermined optical density~~ and the at least one higher-order group of code  
19 markings has an have different optical density ~~different from that of the first group,~~  
20 ~~wherein the groups of code markings have~~ levels in comparison to each other, so that  
21 there are at least three different optical density levels with a detectable gradation of  
22 optical density levels, and wherein the detectable gradation is used for generating  
23 control or position signals.

1 13. (previously amended) The timing device according to claim 10,  
2 wherein the light source is an LED.

14. (canceled)

1 15. (previously amended) The timing device according to claim 10,  
2 wherein in the sensor unit a multi-channel evaluation of the optical signals is  
3 performed.

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